

We Claim:

1. A radiopaque marker, comprising:
a polymer;
radiopaque particles disposed within the polymer having an average diameter of at least about 2 microns and a maximum diameter of about 20 microns; and
a wetting agent for facilitating encapsulation of the particles by the polymer,
wherein the radiopaque particles include greater than about 91 weight percent of the marker.
2. The radiopaque marker of claim 1, wherein the radiopaque particles comprise about 91-95 weight percent of the marker.
3. The radiopaque marker of claim 1, wherein the polymer is selected from a group consisting of Pebax, polyetherurethanes, polyester copolymers, olefin derived copolymers, natural rubbers, synthetic rubbers, thermoplastic elastomers, specialty polymers, polyurethanes, and nylon.
4. The radiopaque marker of claim 1, wherein the radiopaque particles are selected from a group consisting of platinum, gold, iridium, palladium, rhenium, rhodium, tungsten, tantalum, silver and tin.
5. The radiopaque marker of claim 2, wherein the marker includes a tubular form.
6. A method of marking a medical device with a radiopaque material, comprising:
providing a flexible polymeric radiopaque marker containing greater than 91 weight percent radiopaque particles, wherein such particles have an average diameter of at least 2 microns and a maximum diameter of about 20 microns;
positioning the marker on the medical device; and
melt bonding the marker in place.

7. The method of claim 6, wherein the radiopaque particles comprise about 91-95 weight percent of the marker.

8. The method of claim 6, wherein the polymer is selected from a group consisting of Pebax, polyetherurethanes, polyester copolymers, olefin derived copolymers, natural rubbers, synthetic rubbers, thermoplastic elastomers, specialty polymers, polyurethanes and nylon.

9. The method of claim 6, wherein the radiopaque particles are chosen from a group consisting of platinum, gold, iridium, palladium, rhenium, rhodium, tungsten, tantalum, silver, and tin.

10. The method of claim 7, wherein the marker is formed on a PTFE mandrel.

11. The method of claim 10, wherein the markers are equally spaced relative to one another so as to function as a ruler under fluoroscopic inspection.

12. An intracorporeal guide wire, comprising:
a wire core having a distal section and a proximal section;
at least one polymeric radiopaque marker disposed at the distal section, wherein the marker includes a radiopaque material in an amount greater than about 91 weight percent of the marker; and
a polymer coating overlying the marker.

13. The guide wire of claim 12, wherein the radiopaque material includes about 91-93 weight percent inclusive of the marker.

14. The guide wire of claim 12, wherein the radiopaque particles are selected from a group consisting of platinum, gold, iridium, palladium, rhenium, rhodium, tungsten, tantalum, silver, and tin.

15. The guide wire of claim 12, wherein the marker and at least the distal section is coated with a second polymer.

16. The guide wire of claim 12, wherein the wire core at least in the distal section includes a groove receiving the marker therein such that an exterior surface of the marker is relatively flush with the exterior of the wire core.

17. The guide wire of claim 12, wherein the polymer coating includes heat shrink tubing of at least one of PTFE, FEP, and HTPE.

18. The guide wire of claim 12, wherein the radiopaque material includes tungsten that is about 91-93 weight percent inclusive of the marker.

19. The guide wire of claim 12, wherein a hydrophilic coating is disposed over the polymer coating.

20. The guide wire of claim 12, wherein the guide wire includes a plurality of relatively equally spaced apart markers.

21. The guide wire of claim 12, wherein the polymer coating includes a liquid polymer cured by UV or heat, and an outer polymer cover at least partially overlying the liquid polymer that is doped with a radiopaque material.

22. The guide wire of claim 12, wherein the radiopaque marker creates an uneven surface contour on the guide wire and the polymer coating overlying the radiopaque marker fills in the uneven surface contour to create a smooth exterior.

23. An intraluminal medical device, comprising:
a substrate structure selected from the group consisting of a guide wire, a balloon, an embolic filter, and a stent;
at least one polymeric radiopaque marker disposed on the substrate structure, wherein the marker includes a radiopaque material in an amount greater than about 91 weight percent of the marker; and
a polymer coating overlying the marker.